

## Chorea in Nonketotic hyperglycemia

### Letter to Editor

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Article Information: Submission: 20/05/2015; Accepted: 29/06/2015; Published: 04/07/2015

Sir,

A 56 year diabetic lady presented with an episode of sudden onset chorea involving right half of body lasting for approximately 30 minutes. Neurological examination was unremarkable. Laboratory examination revealed high blood glucose levels (346 mg/dl) with absence of ketone bodies in urine. MRI brain performed 10 days later revealed abnormal focal T2/FLAIR hypointense signal in the left caudate, globus pallidus and putamen with thin rim of T2 hyperintensity (Figure 1 A & B, arrow). These lesions appear hyperintense on T1 weighted images (Figure 1 C, arrow). No evidence of restriction of diffusion was seen on diffusion weighted images. These are classic imaging findings of chorea induced by Nonketotic hyperglycemia.

Nonketotic hyperglycemia commonly occurs in elderly patients with non-insulin dependent uncontrolled diabetes mellitus. Presenting features varies from focal seizures, focal neurological

deficit, chorea and hyperosmolar coma in severe cases. In acute phase, Nonketotic hyperglycemia can be confused with ischemic stroke on MRI due to restriction of diffusion. Hypointensity on T2 weighted images and hyperintensity on T1 weighted images can be due to microcalcifications or petechial hemorrhages [1]. Resolution of these MRI findings correlates with disappearance of chorea [2]. Treatment is directed towards normalization of blood glucose with intravenous fluids and insulin therapy.

### References

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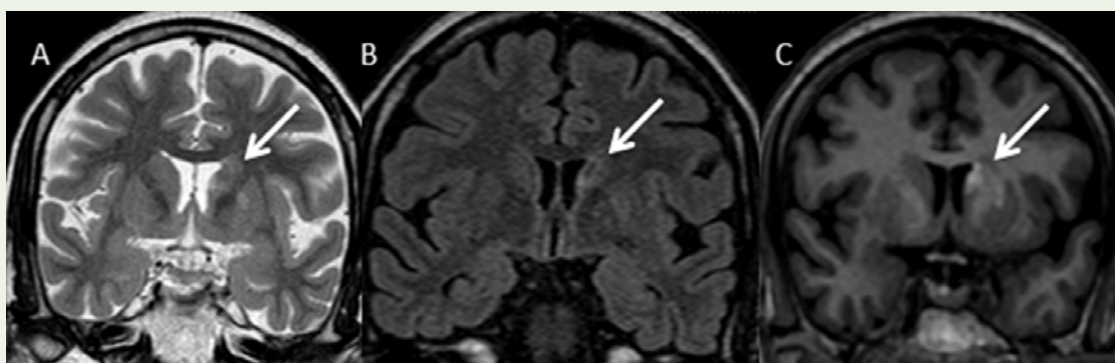


Figure 1: Coronal T2 (A) & FLAIR (B) images reveal hypointense signal in the left caudate and putamen with thin rim of T2 hyperintensity. Hyperintense signal is seen in left basal ganglia on T1 weighted coronal image (C).